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| 10/747,646 | 12/29/2003 | Jasvantrai Shah | RIC99067 | 5723 |

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| EXAMINER | |
|---|---|
| WOLDEKIDAN, HIBRET ASNAKE | |
| **ART UNIT** | **PAPER NUMBER** |
| 2613 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/747,646 | SHAH, JASVANTRAI | |
| | Examiner | Art Unit | |
| | Hibret A. Woldekidan | 2613 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Examiner acknowledges receipt of Applicant's Amendments, remarks, arguments received on 10/21/09. Applicant's arguments have been considered but are moot in view of the new grounds of rejections.

### *Claim Objections*

Claim 2 is objected to because of the following informalities: there is unnecessary comma between the word "signal" and "to" in the limitation, "...the signal as an in-band signal, to the..." Appropriate correction is required.

Claim 15 is objected to because of the following informalities: in the second line of claim 15 there is a word, "communicatios". "communicatios" is not an English word. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

Claims 1-10,15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The independent claims, 1,6 and 15 state, "...*sending a signal from an input protection port of the router to the OXC, where the signal indicates the failure*..." The specification states when a failure occurs between the router and the OXC, the router detects the failure and uses protection port to transmit data(See

Paragraph 25).Further the applicant explained in Paragraph 30, "…*in order for the OXC 115 to connect protection port 210 to the working port 215 of the OXC 115 in response to the failure, a signal is sent from the router 110 to the OXC 115, alerting the OXC 115*…" An alert or failure indication signal is already sent to the OXC before the protection port(210) of the router get connected to the OXC. After the protection switching take places, only data transferred through the protection port. The specification does not say the failure indication signal is sent through the protection port of the router. Actually the protection switching take places after the OXC get notified about the failure. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**2.** Claim 1-10 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al (6,882,765).

Considering claim 1, Erickson discloses in a network including a router and an optical cross-connect system (OXC) **(See Col. 19 lines 1-6, fig. 17b i.e. a network comprising a router (1502) and OXC(1504))**, a method for responding to a failure **(See Col. 23 lines 1-5 and lines 28-41, fig. 17b i.e. a method of responding to a failure)**, the method comprising: detecting the

failure in the router (**See Col. 22 lines 64-67, fig. 17b i.e. detecting a failure in the router(1502) by a port 1521A)**; sending a signal from the router to the OXC **(See Col. 23 lines 1-8, fig. 17b i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC))**, where the signal indicates the failure **(See Col. 23 lines 1-8 and lines 28-41, fig. 17b i.e. sending failure indicating signal from the router(1502) to the oxc(1504))**; causing an input working port of the OXC to connect to the input protection port of the router in response to detection of the signal**(See Col. 23 lines 28-41, fig. 17b i.e. fig. 17 b illustrates that after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC(1504), as a result, an input working port of the OXC in the upstream direction from the network1541B) connects to the input protection port of the router(1522))**; and transmitting data from the router to the OXC via the input protection port**(See Col. 23 lines 34-41, fig. 17b i.e. fig. 17 the OXC working port(1541B) connects to the router protection port(1522) to transmit signal via the protection port. Further the OXC and the router transmit signals bidirectional. Therefore the router also transmits signals to the OXC and vise versa).**

Erickson does not explicitly say sending failure indicating signal from an input protection port of the router.

Erickson discloses the client equipment (1502) which is a router detects failure and signals the OXC(1504) through a signaling interface**(See Col. 18 lines 2-5, Col. 23 lines 2-5, fig. 17b)**. Further he explained, the signaling

interface can be provided over a spare fiber between the client equipment and OXC**(See Col. 18 lines 29-32)**. This spare fiber(1508) is connected to an input spare protection port(1522) of the client equipment or router(See Col. 20 lines 13-16, fig. 17b). Therefore it would have been obvious to one skilled in the art at the time the invention was made to consider the failure indicating signal can be provided over an input protection port of the router or client (1502) to the OXC(1504).

Considering claim 2 Erickson discloses the method of claim 1, where the sending further comprises: sending the signal as an in-band signal, to the OXC **(See abstract, Col. 25 lines 53-57(claim 14), Col. 23 lines 2-5, Col. 25 lines 44-47 i.e. sending failure signaling channel from the router to the OXC(See Col. 23 lines 2-5) to inform connection failure and this signaling channel is an in-band signaling channel(See Col. 25 lines 44-47))**.

Considering claim 3 Erickson discloses the method of claim 2, where the sending an in-band signal to the OXC further comprises: sending a Synchronous Optical Network (SONET) signal to the OXC **(See abstract, Col. 20 lines 5-10 i.e. Communicating SONET channels with the OXC).**

Considering claim 4 Erickson discloses, the method of claim 1, where the sending further comprises: sending the signal as an out-of-band signal to the OXC **(See abstract, Col. 25 lines 22-24(claim 8), Col. 23 lines 2-5, Col. 25 lines 44-47 i.e. An out of band channel or an in band channel can be used to indicate connection failure(See abstract). Erickson further discussed,**

**sending a failure signaling channel from the router to the OXC(See Col. 23 lines 2-5) to inform connection failure and this signaling channel can be an out-of-band signaling channel(See Col. 25 22-24(claim 8), Col. 28 lines 27-31). The out-of-band signaling channel is a dedicated signaling link (See Col. 19 lines 13-18))).**

Considering claim 5 Erickson discloses, the method of claim 4, where the sending an out-of-band signal comprises: the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC **(See Col. 19 lines 1-9 i.e. internet protocol associated with OXC)**.

Considering claim 6 Erickson discloses, a method for responding to a failure in a network including a router and an optical cross-connect system (OXC) **(See Col. 23 lines 28-41 i.e. a method of responding to a failure in a network including a router and OXC)**, the method comprising: receiving a signal at the OXC from the router **(See Col. 23 lines 1-5 i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the oxc(1504))**, the signal indicating a failure of a working port in the router **(See Col. 23 lines 1-5 and lines 28-30, fig. 17B i.e. a failure indication signal sent from the router(1502) to the oxc(1504))**; and connecting the protection port of the router to a working port of the OXC in response to receiving the signal in response to receiving the signal **(See Col. 23 lines 1-5 and lines 28-41, fig. 17b i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the oxc(1504). In response, the OXC working port(1541B) connects to the router(1502) protection port(1522))**.

Erickson does not explicitly say sending failure indicating signal from an input protection port of the router.

Erickson discloses the client equipment (1502) which is a router detects failure and signals the OXC(1504) through a signaling interface**(See Col. 18 lines 2-5, Col. 23 lines 2-5, fig. 17b)**. Further he explained, the signaling interface can be provided over a spare fiber between the client equipment and OXC**(See Col. 18 lines 29-32)**. This spare fiber(1508) is connected to an input spare protection port(1522) of the client equipment or router(See Col. 20 lines 13-16, fig. 17b). Therefore it would have been obvious to one skilled in the art at the time the invention was made to consider the failure indicating signal can be provided over an input protection port of the router or client (1502) to the OXC(1504).

Considering claim 7 Erickson discloses the method of claim 6, where the receiving further comprises: receiving an in-band signal, from the input protection port of the router, at the OXC **(See abstract, Col. 25 lines 53-57(claim 14), Col. 23 lines 2-5, Col. 25 lines 44-47 i.e. receiving failure signaling channel from the router to the OXC(See Col. 23 lines 2-5) and this signaling channel is an in-band signaling channel(See Col. 25 lines 44-47). The in-band signaling channel is a dedicated signaling link used in parallel with each of the working link(See Col. 25 lines 53-57(claim 14)). This shoes that the signaling channel is transmitted not using a working channel but using a spare channel. Erickson further discusses providing signaling interface a protection or a spare path(See Col. 18 lines 29-31))**.

Considering claim 8 Erickson discloses the method of claim 7, where the receiving an in-band signal at the OXC comprises: receiving a Synchronous Optical Network (SONET) signal at the OXC **(See abstract, Col. 20 lines 5-10 i.e. Communicating SONET channels with the OXC)**.

Considering claim 9 Erickson discloses the method of claim 6, where the receiving further comprises: receiving an out-of-band signal at the OXC **(See abstract, Col. 25 lines 22-24(claim 8), Col. 23 lines 2-5, Col. 25 lines 44-47 i.e. An out of band channel or an in band channel can be used to indicate connection failure(See abstract). Erickson further discussed, receiving a failure signaling channel from the router to the OXC(See Col. 23 lines 2-5) to inform connection failure and this signaling channel can be an out-of-band signaling channel(See Col. 25 22-24(claim 8), Col. 28 lines 27-31). The out-of-band signaling channel is a dedicated signaling link (See Col. 19 lines 13-18)))**.

Considering claim 10 Erickson discloses, the method of claim 9, where the receiving an out-of-band signal further comprises: addressing the out-of-band signal to an Internet Protocol address associated with the OXC **(See Col. 19 line 1-9 i.e. internet protocol associated with OXC)**.

Considering claim 15, Erickson discloses a communicatios network for transmitting data **(See fig. 7 i.e. optical network for transmitting data)**, the communication network comprising: a router for receiving the data from a terminal **(See Col 19 lines 1-7 a router for receiving a data from other units)**, the router comprising: an input working port to receive the data from the terminal

**(See Col. 19 lines 5-6, Col. 20 lines 22-26, fig. 17B i.e. working port(1521) in the router(1502) for communicating signals)**; and an input protection port to receive the data from the terminal in response to a failure of the working unit or path**(See fig. 17b, Col. 23 lines 34-40 i.e. protection port(1522) for receiving the data in response to a failure in the working unit or path(1702))**; and an optical cross-connect system (OXC) to receive the data from the router **(See Col. 19 lines 1-7, fig. 15 elements 1504 i.e. OXC for receiving data from the router)**, the OXC system comprising an input working port **(See fig. 17B i.e. OXC comprising working port(1541B). Since the transmission is a bidirectional transmission, the working port(1541B) can be consider both an input and out put port)**, where the input working port of the OXC is connected to the input protection port of the router in response to a signal, indicating the failure of the input working port of the router, and received failure signal from the router**(See Col. 23 lines 28-41, fig. 17b i.e. fig. 17 b illustrates that after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC(1504), as a result, the input port of the OXC working port(1541B) in the upstream direction is connected to the router input protection port(1522))**.

Erickson does not explicitly say sending failure indicating signal received from the input protection port of the router.

Erickson discloses the client equipment (1502) which is a router detects failure and signals the OXC(1504) through a signaling interface**(See Col. 18 lines 2-5, Col. 23 lines 2-5, fig. 17b)**. Further he explained, the signaling

interface can be provided over a spare fiber between the client equipment and OXC**(See Col. 18 lines 29-32)**. This spare fiber(1508) is connected to an input spare protection port(1522) of the client equipment or router(See Col. 20 lines 13-16, fig. 17b). Therefore it would have been obvious to one skilled in the art at the time the invention was made to consider the failure indicating signal can be received from the input protection port of the router or client (1502) to the OXC(1504).

Considering Claim 16 Erickson discloses the communications network of claim 15, where the router transmits a signal indicating the failure to the OXC, the signal causing the OXC to connect the input protection port to the input working port of the OXC **(See Col. 23 line 6-27, fig. 15 i.e. router transmit signal incase of a failure)**.

Considering claim 17 Erickson disclose, the communications network of claim 16, where the signal is an in-band signal **(See abstract i.e. in-band signal)**

Considering claim 18 Erickson disclose, the communications network of claim 17, where the in-band signal is a Synchronous Optical Network (SONET) signal **(See Col. 20 lines 5-10 i.e. SONET channels)**

Considering claim 19 Erickson discloses the communications network of claim 16, where the signal is an out-of-band signal **(See Abstract, Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16 i.e. an out-of-band signal)**.

Considering claim 20 Erickson discloses, the communications network of claim 19, where the out-of-band signal is addressed to an Internet Protocol address associated with the OXC **(See Col. 19 lines 1-9 i.e. internet protocol associated with OXC)**.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al (6,882,765) in view of Korotky et al. (US 2004/0052,518).

Considering claim 1, Erickson discloses in a network including a router and an optical cross-connect system (OXC) **(See Col. 19 lines 1-6, fig. 17b i.e. a network comprising a router (1502) and OXC(1504))**, a method for responding to a failure **(See Col. 23 lines 1-5 and lines 28-41, fig. 17b i.e. a method of responding to a failure)**, the method comprising: detecting the failure in the router (**See Col. 22 lines 64-67, fig. 17b i.e. detecting a failure in the router(1502) by a port 1521A)**; sending a signal from the router to the OXC **(See Col. 23 lines 1-8, fig. 17b i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC))**, where the signal indicates the failure **(See Col. 23 lines 1-8 and lines 28-41, fig. 17b i.e. sending failure indicating signal from the router(1502) to the oxc(1504))**; causing an input working port of the OXC to connect to the input protection port of the router in response to detection of the signal**(See Col. 23 lines 28-41, fig. 17b i.e. fig. 17 b illustrates that after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC(1504), as a result, an input working port of the OXC in the upstream direction from the network1541B) connects to the input protection port of the**

**router(1522))**; and transmitting data from the router to the OXC via the input protection port**(See Col. 23 lines 34-41, fig. 17b i.e. fig. 17 the OXC working port(1541B) connects to the router protection port(1522) to transmit signal via the protection port. Further the OXC and the router transmit signals bidirectional. Therefore the router also transmits signals to the OXC and vise versa).**

Erickson teaches sending an in-band channel from the router to signal connection failure to the OXC**(See abstract, Col. 23 lines 18-23).**

Erickson does not explicitly disclose sending failure indicating signal from an input protection port of the router.

Korotky teaches an in-band failure indicative signal is sent through the protection path to indicate the failure of a working path**(See Paragraph 12).**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Erickson, and have an in-band failure indicative signal to be sent through the protection path, as taught by Korotky, thus providing an efficient data transmission system by sending the failure indicative signal through a protection port incase all the working paths fails, as discussed by Korotky **(Paragraph 12)**.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaya et al (US 2002/0184387) in view of Pan (7,274,869)

Considering Claim 11 Yamaya discloses an optical cross-connect system comprising: a spare port to transmit low priority data to or from a router**(See**

**Paragraph 51,100,101, fig. 13 i.e. a switching unit(8) which has a primary port(P1) and a substitute or spare port(P2) is coupled to a master router(10) and a back up router(11). The spare port(P2) is coupled to the back up router(11))**; and a working port to transmit high priority data to or from a primary router**(See Paragraph 100,101, fig. 13 i.e. the primary port of the switching unit(8) is coupled to the master router(10) to transmit signals to or from the router(10))**, where the working port is connected to the router in response to a failure of the primary router**(See Paragraph in response to a trouble in the master router(10), the primary port of the backup router is coupled to the switching unit(8))**

Yamaya does not explicitly disclose transmitting a low priority data using a spare port and transmitting a high priority data using a working port and where the transmission of low priority data to or from the router is preempted by the transmission of the high priority data to or from the router, in response to the failure of the primary router.

Pan teaches transmitting low priority data using a spare port and transmitting high priority data using a working port **(See Col. 15 lines 4-8 and lines 24-27 i.e. primary path for high priority data and alternative or spare path for non priority data)** and where the transmission of low priority data to or from the router is preempted by the transmission of the high priority data to or from the router, in response to the failure of the primary router**(See Col. 2 lines 26-36 i.e. in response to a failure, high priority data transmitted through a**

**backup link and the lower priority data in the backup link will be preempted to transmit high priority data)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamaya, and transmit a low priority data using a spare port and a high priority data using a working port and where the transmission of low priority data to or from the router to be preempted by the transmission of the high priority data to or from the router, in response to the failure of the primary router, as taught by Pan, thus providing an efficient data transmission system by utilizing bandwidth for high priority data by permitting the low priority data, as discussed by Pan **(Col. 2 lines 32-35 and Col. 3 lines 38-41)**.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaya et al (US 2002/0184387) in view of Pan (7,274,869) further in view of Erickson et al (6,882,765).

Considering claim 12, Yamaya and Pan disclose the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an inband signal from the router.

Erickson teaches the working port is connected to the router in response to receiving an in-band signal from the router. **(See abstract, Col. 23 line 17-27, fig. 17B i.e. in-band signaling between the working port of the OXC and router)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamaya and Pan, and have the

OXC working port to be connected to the router in response to receiving an in-band signal from the router, as taught by Erickson, thus allowing a means of minimizing the time to customer service interruption during switching from the failed port to the protection port by having both ports in the same unit, as discussed by Erickson **(Col. 2 line 63-Col. 3 line 1)**.

Considering claim 13, Yamaya and Pan do not specifically disclose the optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router

Erickson teaches the optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router **(See Col. 19 lines 1-7, Col. 23 line 6-27, fig. 15 i.e. working port is connected to a router in case of a failure in primary path)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamaya and Pan, and the OXC working port to be connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router for the reason discussed in claim 12

Considering claim 14, Yamaya and Pan do not specifically disclose the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router.

Erickson teaches the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router **(See Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16 lines 28-46 i.e. working port is connected to a router in response to an out of bound signal)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamaya and Pan, and the working port is connected to the router in response to receiving an out-of-band signal from the router for the reason discussed in claim 12.

***Conclusions***

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIBRET A. WOLDEKIDAN whose telephone number is (571)270-5145. The examiner can normally be reached on Monday to Thursday from 8:00 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571)272-3078 . The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. A. W./

Examiner, Art Unit 2613

/Kenneth N Vanderpuye/

Supervisory Patent Examiner, Art Unit 2613